

# **Contents**

## **VII Foreword**

Klenk, H.-D.; Matrosovich, M.N. (Marburg); Stech, J. (Greifswald)

## **1 Epidemiology of Avian Influenza**

Osterhaus, A.D.M.E.; Munster, V.J.; Fouchier, R.A.M. (Rotterdam)

## **11 H5N1 in Asia**

Yen, H.-L. (Memphis, Tenn.); Guan, Y.; Peiris, M. (Hong Kong); Webster, R.G. (Memphis, Tenn.)

## **27 Epidemiology and Control of H5N1 Avian Influenza in China**

Chen, H.; Bu, Z.; Wang, J. (Harbin)

## **41 Avian Influenza in Northern Eurasia**

Lvov, D.K.; Kaverin, N.V. (Moscow)

## **59 Avian Influenza in Italy 1997–2006**

Capua, I.; Cattoli, G.; Terregino, C.; Marangon, S. (Legnaro/Padova)

## **71 Avian Influenza Outbreaks in Germany – Development of New Avian Vaccines**

Werner, O.; Harder, T.; Veits, J.; Römer-Oberdörfer, A.; Fuchs, W.; Beer, M.; Conraths, F.J.; Mettenleiter, T.C. (Greifswald)

## **88 The Role of Pigs in Interspecies Transmission**

Brown, I.H. (Addlestone)

## **101 History of Research on Avian Influenza**

Scholtissek, C. (Linden)

## **118 Reverse Genetics of Influenza Viruses – Applications in Research and Vaccine Design**

Neumann, G. (Madison, Wisc.); Horimoto, T. (Tokyo); Kawaoka, Y. (Madison, Wisc./Tokyo/Saitama)

## **134 Receptor Specificity of Influenza Viruses and Its Alteration during Interspecies Transmission**

Matrosovich, M.N. (Marburg); Gambaryan, A.S. (Moscow); Klenk, H.-D. (Marburg)

- 156 Cleavage Activation of the Influenza Virus Hemagglutinin and Its Role in Pathogenesis**  
Garten, W.; Klenk, H.-D. (Marburg)
- 168 Structure and Function of the Influenza A Virus Ribonucleoprotein: Transcription and Replication**  
Ortín, J. (Madrid)
- 187 Influenza A Virus Polymerase: A Determinant of Host Range and Pathogenicity**  
Stech, J. (Greifswald)
- 195 Influenza A Virus Virulence and Innate Immunity: Recent Insights from New Mouse Models**  
Haller, O.; Kochs, G.; Staeheli, P. (Freiburg)
- 210 Signaling to Life and Death: Influenza Viruses and Intracellular Signal Transduction Cascades**  
Ludwig, S. (Münster); Planz, O. (Tübingen); Pleschka, S. (Giessen); Wolff, T. (Berlin)
- 225 Cytokines in the Pathogenesis of Highly Virulent Influenza Viruses in Humans**  
Van Reeth, K. (Gent)
- 252 Antivirals and Resistance**  
Hay, A.J.; Collins, P.J. (London); Russell, R.J. (Fife)
- 272 The 1918 Influenza Pandemic: Lessons from the Past Raise Questions for the Future**  
Steel, J.; Palese, P. (New York, N.Y.)
- 287 Author Index**
- 288 Subject Index**